

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |  |  |                                    |
|---|--|--|------------------------------------|
| <b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>  |  | Docket Number (Optional)                     |                                    |
|   |  | VM 03-009-US                                 |                                    |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]<br><br>on _____<br><br>Signature _____<br><br>Typed or printed name _____ |  | Application Number<br><br>10/656,478         |                                    |
|   |  | Filed<br><br>September 5, 2003               |                                    |
|   |  | First Named Inventor<br><br>Hassan MOSTAFAVI |                                    |
|   |  | Art Unit<br><br>2624                         | Examiner<br><br>Allison, Andrae S. |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.  
 assignee of record of the entire interest.  
 See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
 (Form PTO/SB/96)  
 attorney or agent of record. 51,541  
 Registration number \_\_\_\_\_.  
 attorney or agent acting under 37 CFR 1.34.  
 Registration number if acting under 37 CFR 1.34 \_\_\_\_\_.

/Gerald Chan/

Signature

Gerald Chan

Typed or printed name

408-321-8663

Telephone number

August 5, 2009

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
 Submit multiple forms if more than one signature is required, see below\*.

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | *Total of <u>1</u> forms are submitted. |
|-------------------------------------|---|

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

**Hassan Mostafavi**

Serial No.: 10/656,478

Filed: September 5, 2003

For: SYSTEMS AND METHODS FOR  
TRACKING MOVING TARGETS AND  
MONITORING OBJECT POSITIONS

Group Art Unit: 2624

Examiner: Allison, Andrae S.

Confirmation No.: 8695

**NOTICE OF APPEAL &**  
**REQUEST FOR PRE-APPEAL BRIEF CONFERENCE**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Advisory Action mailed July 20, 2009, Applicant herein submits a Notice of Appeal pursuant to 37 C.F.R. § 41.31(a), and respectfully request for a pre-appeal brief conference.

Claims 1-4, 6-9, 12-14, 18, 20, 23-27, 31-36, and 61-63 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. 2003/0086596 (Hipp) in view of U.S. Patent No. 6,266,443 (Vetro), and further in view of U.S. Patent No. 5,535,289 (Ito).

Claim 1 recites that the act of enhancing is performed such that an image of the moving object is enhanced relative to an image of a relatively stationary object *if the moving object moves relative to the stationary object* (Emphasis Added). Claims 22, 31, and 63 recite similar limitations. Thus, these claims describe that the act of enhancing an image of an object *is conditioned* upon the object moving relative to a stationary object.

Applicant agrees with the Examiner that Hipp does not disclose or suggest enhancing an image if the moving object moves relative to the stationary object. According to page 9 of the Office Action, column 1, line 64 to column 2, line 4 of Vetro allegedly disclose the above limitations. Applicant respectfully disagrees.

This cited passages of Vetro clearly do not disclose or suggest that the enhancement of an image of an object is *conditioned upon the object moving relative to a stationary object*. Rather, the cited passages of Vetro disclose producing a so-called “motion enhanced image” by “filtering and motion analysis” (see c1:66-c2:1). Notably, Vetro is concerned with finding a boundary of an object in a video sequence (see column 1, lines 64-65, and column 2, lines 32-35), and the so-called “motion analysis” of Vetro involves “snake imaging,” which allows an object’s boundary to be determined (see column 3, line 51 to column 4, line 16). There is nothing in Vetro that discloses or suggests that an enhancement of an image of an object is conditioned upon whether the object moves relative to a stationary object. For example, there is nothing in Vetro that discloses that if the object is stationary, then it is not enhanced, and if it moves, then it is enhanced. Rather, the objective of Vetro is to determine a boundary of an object in different image frames of a sequence, regardless of whether it moves or not. Thus, Vetro clearly does not disclose or suggest the above limitations.

According to the Advisory Action, the above cited passages of Vetro disclose that “motion enhance[d] images are produced by filtering motion analysis, which means that the images are enhanced based on motion activity.” However, Applicant respectfully notes that the claims do not *broadly* recite that motion enhancement is “based on” motion activity. Rather, the claims describe that an enhancement of an object’s image is conditioned upon whether the object moves relative to a stationary object. As discussed Vetro clearly does not disclose or suggest such feature.

Ito also does not disclose or suggest the above limitations, and is not being relied upon for the disclosure of the above limitations. Since none of the cited references discloses or suggests the above limitations, any purported combination of these references cannot result in the subject matter of claims 1, 22, 31, and 63. For at least the foregoing reasons, Applicant submits that the *prima facie* case of the § 103 rejection has not been established, and requests that the rejection be withdrawn.

Claim 1 also recites that *the act of enhancing is accomplished at least in part by performing image averaging and image subtraction* (Emphasis Added). Claims 22, 31, and 63 recite similar limitations. According to pages 8-9 of the Office Action, paragraph 40 of Hipp allegedly discloses image averaging, and column 2, lines 1-3 and figure 1a of Ito allegedly disclose image subtraction.

As an initial matter, Applicant respectfully notes that paragraph 40 of Hipp discloses performing image averaging for images that are generated in a sequence (e.g., with same energy) as

an object moves. On the other hand, the cited passage of Ito discloses performing image subtraction for two images that are generated using different energies (low and high energies). Notably, the image subtraction technique of Ito is specifically for reducing noise in “energy subtraction image” (see c1:6-11), while the image averaging technique of Hipp is specifically for reducing noise in an image sequence (video). Therefore, one skilled in the art would not be motivated to apply the multi-energy image subtraction method to a method of averaging images formed in sequence with a single energy, and vice versa.

According to the Advisory Action, both methods of Hipp and Ito are allegedly directed toward boundary detection based on motion activity, and therefore, it would have been allegedly obvious to combine the two methods. However, Applicant respectfully notes that just because two references are allegedly in a same field of art, that alone is not sufficient to sustain the *prima facie* case of a § 103 rejection. Rather, there must be some legitimate reason to combine the references, and in the purported manner. As discussed, the subtraction method of Ito is specifically described for reducing noise in images generated using different energies, and the averaging technique of Hipp is for reducing noise in images in a sequence that is well known to involve a single energy. Since Ito and Hipp disclose mutually exclusive techniques for reducing noise in respectively different types of imaging, there is no legitimate reason to combine the two techniques.

Also, since each of the methods is complete by itself in achieving the object stated in the respective reference (i.e., the subtraction method of Ito by itself can already reduce noise in multi energies images, and the averaging method of Hipp by itself can already reduce noise in a video sequence), there is certainly no reason to combine the methods, and certainly not in the manner (i.e., selectively picking only the subtraction step from the method of Ito, selectively picking only the averaging step from the method of Hipp, and combining them) purported in the Office Action.

Further, as discussed in last response, the purported combination of Hipp and Ito would render both of these references inoperable since Hipp requires images in a sequence (presumably generated using a same energy level) to be averaged when on the other hand, Ito requires images with different energies be used in the image subtraction. Note that the *prima facie* case of the § 103 rejection cannot be established if the purported combination would render either reference inoperable. Applicant notes that the above argument was presented in the last response (see p16 of 7/5/09 response), but was not considered by the Examiner. For these additional reasons, Applicant submits that the *prima facie* case of the § 103 rejection has not been established, and requests that the rejection be withdrawn.

Claims 40, 43, 46, 47-49, 50, 53, and 56 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,075,557 (Holliman) in view of Hipp.

Claim 40 recites that the act of *determining whether the object has moved* comprises *using a contrast associated with the first composite image* (which is obtained by performing a subtraction function) (Emphasis Added). Claims 50 and 53 recite similar limitations. As discussed in the last response, the cited passage (element 49 in figure 12, and column 11, lines 33-38) of Holliman clearly does not disclose or suggest the above limitations (See pp16-17 of 7/5/09 Response).

In the Advisory Action, the Examiner maintains that the so-called “differential method” in column 11, lines 33-38 of Holliman allegedly meets the above limitations regarding a composite image for determining whether the object has moved. However, Applicant respectfully notes that in the differential method of Holliman, it is presumed that there is already object movement (see column 14, lines 65-67: assuming movement is translational), and the differential method is specifically for determining an amount of such movement (see column 14, line 65 to column 15, line 67, and figure 22 of Holliman – showing determination of  $\Delta x$ ). Since the differential method of Holliman assumes that an object has already moved, to the extent that it is analogized as the claimed “composite image,” it clearly is not for determining *whether an object has moved*, as described in the claims.

Hipp also does not disclose the above limitations, and is not being relied upon for the disclosure of the above limitations, and therefore fails to make up the deficiencies present in Holliman. Since Holliman and Hipp do not disclose or suggest the above limitations, any purported combination of these references cannot result in the subject matter of claims 40, 50, and 53. For at least the foregoing reasons, Applicant respectfully submits that the *prima facie* case of the § 103 rejection has not been established, and requests that the rejection be withdrawn.

Claims 64-66 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Holliman in view of Hipp, and further in view of U.S. Patent No. 5,134,472 (Abe).

Claim 64 recites that the act of determining whether the object has moved *does not require a determination of an amount of movement by the object* (Emphasis Added). Claim 65 recites that the means for determining whether the object has moved is configured to determine whether the object has moved *without determining an amount of movement by the object* (Emphasis Added).

Claim 66 recites that the act of determining whether the object has moved *does not require a determination of an amount of movement by the object* (Emphasis Added).

Applicant agrees with the Examiner that Holliman and Hipp do not disclose or suggest the above limitations. According to the Advisory Action, column 1, lines 43-55 of Abe allegedly disclose the above limitations. Applicant respectfully disagrees. First, Applicant respectfully notes that column 1, lines 43-55 does not disclose or suggest that an amount of movement of the object is *not* determined (Note that it is well known in the patent law that in order to properly rely on a reference for an alleged disclosure of a negative limitation, the reference must explicitly disclose such negative limitation, and that a non-disclosure of a limitation cannot be used to infer that the reference discloses a negative of such limitation).

Also, the cited passage of Abe actually discloses “localization means” which is well known to be a device for determining a position of a moving object. This is further evidenced by the fact that Abe actually discloses using position data in its algorithm (See for example, claim 7 stating “generating at least two position signals corresponding to at least two positions of the moving object.”). Column 8, line 31 of Abe further discloses  $YE_f - YE_n$ , which corresponds to an *amount of movement* of object from coordinate  $YE_n$  to coordinate  $YE_f$  (see figure 8B). Thus, Abe clearly does not disclose or suggest the above limitations.

Since Holliman, Hipp, and Abe do not disclose or suggest the above limitations, any purported combination of these references cannot result in the subject matter of claims 64-66. For at least the foregoing reasons, Applicant submits that the *prima facie* case of the § 103 rejection has not been established, and requests that the rejection be withdrawn.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Vista IP Law Group’s Deposit Account No. **50-1105**, referencing billing number **VM 03-009**. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Vista IP Law Group’s Deposit Account No. **50-1105**, referencing billing number **VM 03-009**.

Respectfully submitted,

DATE: August 5, 2009

By: /Gerald Chan/  
Gerald Chan  
Registration No. 51,541

VISTA IP LAW GROUP, LLP  
1885 Lundy Ave., Suite 108  
San Jose, California 95131  
Telephone: (408) 321-8663 (Ext. 203)  
Facsimile: (408) 877-1662